

## UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO	
09/975,764	10/09/2001	Harry Dwyer	Dwyer 5-13	9496	
7590 01/02/2004			EXAMINER		
Ryan, Mason & Lewis, LLP			LANE, JOHN A		
Suite 205			A DE LEUE	D. DED . W. (DED	
1300 Post Road			ART UNIT	PAPER NUMBER	
Fairfield, CT (	06430		2188	1	
			DATE MAILED: 01/02/2004		
			DATE MAILED. 01/02/2	-/	

Please find below and/or attached an Office communication concerning this application or proceeding.

	s.				_			
		Appl	ication No.	Applicant(s)				
Office Action Summary		09/9	75,764	DWYER ET AL				
		Exan	niner	Art Unit				
			A Lane	2188	a delica a			
<i> ٦</i> Period for R	he MAILING DATE of this commu eply	nication appears o	n the cover sneet	with the correspondence	; address			
THE MA - Extension after SIX - If the peri - If NO per - Failure to - Any reply	TENED STATUTORY PERIOD LING DATE OF THIS COMMUN s of time may be available under the provision (6) MONTHS from the mailing date of this cond for reply specified above is less than thirty od for reply is specified above, the maximum reply within the set or extended period for repreceived by the Office later than three months tent term adjustment. See 37 CFR 1.704(b).	NICATION. as of 37 CFR 1.136(a). In amunication. (30) days, a reply within th statutory period will apply ly will, by statute, cause th	no event, however, may ne statutory minimum of t and will expire SIX (6) M ne application to become	a reply be timely filed thirty (30) days will be considered to the mailing date of the ABANDONED (35 U.S.C. § 133).	nis communication.			
1)⊠ Re	sponsive to communication(s) fi	led on <u>09 October</u>	<u>2001</u> .					
2a) <u></u> Th	is action is FINAL.	2b)⊠ This action	is non-final.					
3)∏ Sir	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition	of Claims							
4a) 5)∭ Cla 6)⊠ Cla 7)∭ Cla	aim(s) <u>1-32</u> is/are pending in the Of the above claim(s) is/ aim(s) is/are allowed. aim(s) <u>1-32</u> is/are rejected. aim(s) is/are objected to. aim(s) are subject to restr	are withdrawn fror						
Application								
9)∐ The	e specification is objected to by t	he Examiner.						
10)∐ The	e drawing(s) filed on is/are	e: a) accepted	or b) objected t	o by the Examiner.				
	plicant may not request that any obj							
	placement drawing sheet(s) includir		· ·	• • • • • • • • • • • • • • • • • • • •				
	e oath or declaration is objected	to by the Examine	r. Note the attach	ed Office Action of form	F10-152.			
-	er 35 U.S.C. §§ 119 and 120		da 25 U.O.O	> C 440(=) (d) == (f)				
a)	knowledgment is made of a clair All b) Some * c) None of: Certified copies of the priorit Certified copies of the priorit copies of the certified copies application from the International the attached detailed Office actinowledgment is made of a claim a specific reference was includ FR 1.78. The translation of the foreign land the company of the foreign land the company of the foreign land the company of the first second the company of the first second the company of the company of the company of the first second the company of the company	y documents have y documents have s of the priority document on all Bureau (PCT on for a list of the for domestic prior ed in the first sent anguage provision for domestic prior	been received. been received in cuments have been received in cuments have been received in a sum of the specified copies of the specified application has sity under 35 U.S.	Application No en received in this Nation ot received. C. § 119(e) (to a provision fication or in an Application been received. C. §§ 120 and/or 121 sin	onal application) ion Data Sheet. nce a specific			
Attachment(s)	Poteronees Cited (PTO 902)		4) 🗀 Intension	w Summary (PTO-413) Paper	No(s)			
2) 🔲 Notice of	References Cited (PTO-892) Draftsperson's Patent Drawing Review on Disclosure Statement(s) (PTO-1449)			w Summary (P10-413) Paper of Informal Patent Application (				

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## **DETAILED ACTION**

- 1. Claims 1-32 are presented for examination.
- 2. The examiner requests, in response to this Office action, any reference(s) known to qualify as prior art under 35 U.S.C. sections 102 or 103 with respect to the instant claims. That is, any prior art similar to the instant claimed invention that could reasonably be used in a 102/103 rejection. This request does not require applicant to perform a search. This request is not intended to interfere with or go beyond that required under 37 C.F.R. 1.56 or 1.105. This request may be fulfilled simply by asking the attorney(s) of record handling prosecution and the inventor(s)/assignee for references qualifying as prior art. A simple statement that the query has been made and no prior art found is sufficient to fulfill the request. Otherwise, along with a 102/103 submission a discussion of why the reference(s) qualifies as prior art with respect to the instant claims is requested. A response to this inquiry is greatly appreciated.

The examiner also requests, in response to this Office action, support be shown for language added to the claims on amendment. That is, indicate support for newly added claim language by specifically pointing to page(s) and line no(s). in the specification and/or drawing figure(s). This will assist the examiner in prosecuting the application.

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3. Claims 16-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 16, the dependency is unclear. It appears "16" should be ---15---.

The remaining claims are rejected as they depend from a rejected base claim.

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103 (a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103(a).

5. Claims 1-32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art in view of Malamy et al. (Pat. No. 5,353,425).

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The admitted prior art found on pages 1-3 of the present specification teaches a cache for storing a plurality of frames from main memory. The claimed step of "locking frames if a task is interrupted by another task" corresponds to the locking of an executing task's frames prior to an interruption from another task's execution (page 2, lines 8-10). However, locking a frame or frames in accordance with a most recently used scheme is not discussed.

Malamy is introduced as a teaching of locking pages or blocks in the cache in accordance with a most recently used locking scheme. As shown in figure 4c an MRU bit (essentially a lock bit) locks a cache line or lines in accordance with a most recently used locking scheme. This scheme increases operating speed, requires less complex logic than a LRU scheme and does not require much high-speed cache memory to implement (col. 3, lines 6-13).

Because the most recently used locking scheme of Malamy provides for an increase in operating speed and reduction in complexity it would have been obvious to use such a locking scheme to lock the frames/block/pages/lines of the cache device of the admitted prior art. Therefor, the claimed invention would have been obvious to one of ordinary skill in the art at the time of the invention.

Official notice is taken of the prior art teaching any claim feature not specifically discussed above. That is, any prior art (including that of record) teaching the more well known claim features commonly found in the dependent claims. The claim features, while part of the invention, appears to be well known and their relevance not essential to

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the main invention found in the independent claim(s). Thus, a detailed discussion of the well known claim features is not warranted at this time. It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the admitted prior art with the officially taken prior art given the state of the art at the time the well known claim features were invented.

## Any response to this action should be mailed to:

Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office

PO Box 1450

Alexandria, VA 22313-1450

## or faxed to:

(703) 872-9306, (for Official communications intended for entry)

Or:

(703) 872-9306, (for Non-Official or draft communications, please label "Non-Official" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack A. Lane whose telephone number is 703 305-3818. The examiner can normally be reached on Mon-Fri from 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on 703 306-2903.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-3900.

PRIMARY EXAMINER